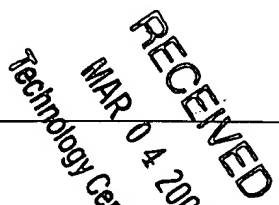
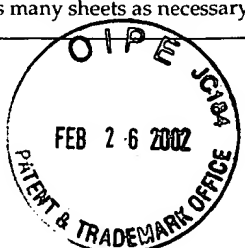


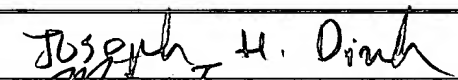
Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 001340.P077	Application Number: 09/710,718
Page 1 of 2		First Named Inventor: Cecilia Gabriela Galarza, et al.	
		Filing Date: 11/10/2000	

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
J. D. MJ		US4669113		Ash, et al.	5/26/1987	
J. D. MJ		US5063351		Goldthorp, et al.	11/5/1991	
J. D. MJ		US5343461		Barton, et al.	8/30/1994	
J. D. MJ		US5858151		Boudy	12/8/1998	
J. D. MJ		US5926538		Deryugin, et al.	7/20/1999	
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J. D. MJ		US6055297		Terry	4/25/2000	

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				

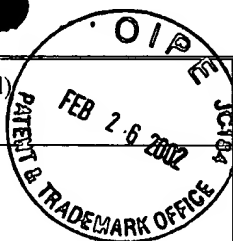
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Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 001340.P077	Application Number: 09/710,718
	First Named Inventor: Cecilia Gabriela Galarza, et al. Filing Date: Novemeber 10, 2000	



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OTHER ART - NO PATENT LITERATURE DOCUMENTS

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J. D.		PCT Search Report, PCT/US00/30859, 10 November 2000, Date of Mailing: 27 March 2001 (5 pgs.)	
J. D.		PCT Search Report, PCT/US00/30858, 10 November 2000, Date of Mailing: 16 March 2001 (7 pgs.)	
J. D.		PCT Search Report, PCT/US00/30887, 11 November 1999, Date of Mailing: 09 August 2001 (24 pgs.)	
J. D.		PCT Search Report, PCT/US00/30967, 10 November 2000, Date of Mailing: 24 January 2001 (7 pgs.)	
J. D.		PCT Search Report, PCT/US00/31026, 10 November 2000, Date of Mailing: 22 January 2001 (7 pgs.)	

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Supplement to form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 3

Complete if Known

Application Number	09/710,718
Filing Date	November 10, 2000
First Named Inventor	Cecilia Gabriela Galarza
Art Unit	2631
Examiner Name	Unknown
Attorney Docket Number	6515P026

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.¹	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code² (if known)			
MJ		US-3,814,868	06-04-1974	Bradley	
		US-4,649,505	03-10-1987	Zinser, Jr. et al.	
		US-4,715,064	10-22-1987	Claessen	
		US-4,760,596	07-26-1988	Agrawal et al.	
		US-4,987,569	01-22-1991	Ling et al.	
		US-5,157,690	10-20-1992	Buttle	
		US-5,226,041	07-06-1993	Waclawsky et al.	
		US-5,319,636	06-07-1994	Long et al.	
		US-5,329,547	07-12-1994	Ling	
		US-5,406,552	04-11-1995	Long et al.	
		US-5,548,222	08-20-1996	Jensen et al.	
		US-5,521,971	05-28-1996	Key et al.	
		US-5,929,896	07-27-1999	Goodman et al.	
		US-5,761,614	06-02-1998	Leitch et al.	
		US-5,862,157	01-19-1999	Bessios	
		US-6,091,713	07-18-2000	Lechleider et al.	
		US-6,161,209	12-12-1000	Moher	
		US-6,172,970	01-09-2001	Ling et al.	
		US-6,249,762	06-19-2001	Kirsteins et al.	
		US-6,317,495	11-13-2001	Gaikwad et al.	

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Examiner Initials*	Cite No.¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T³
		Country Code⁴ - Number⁴ - Kind Code⁴ (if known)				
MJ		EP0917314A2	05-19-1999	Dyke		
MJ		EP0917314A3	10-10-2001	Dyke		
MJ		EO98/52312A2	11-19-1998	Chow et al.		
MJ		EO98/52312A3	11-19-1998	Chow et al.		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	2	of	3
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Application Number	09/710,718
Filing Date	November 10, 2000
First Named Inventor	Cecilia Gabriela Galarza
Art Unit	2631
Examiner Name	Unknown
Attorney Docket Number	6515P026

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Institute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	09/710,718		
		Filing Date	November 10, 2000		
		First Named Inventor	Cecilia Gabriela Galan		
		Art Unit	2631		
		Examiner Name	Unknown		
Sheet	3	of	3	Attorney Docket Number	6515P026

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mj		PETERSEN, BRENT R., et al., "Minimum Mean Square Equalization in Cyclostationary and Stationary Interference-Analysis and Subscriber Line Calculations", Student Member, IEEE Journal, Vol. 9, No. 6, August 1991, pp. 11.	
mj		VALENTI, CRAIG F., Bellcore, "Cable Crosstalk Parameters and Models", ANSI Contribution TIE1.4/97-302 Technical Subcommittee Working Group Members, Spectral Compatibility, Morristown, NJ 07960, USA, September 22, 1997, pp. 8.	
		V	

Examiner Signature	<i>M. J. [Signature]</i>	Date Considered	6/24/04
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PTO/SB/08A (10-96)

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	Application No	09/710,718
	Filing Date	November 10, 2000
	First Named Inventor	Cecilia Gabriela Galarza et al
	Group Art Unit	2631
	Examiner Name	Unassigned
Sheet 1 of 9	Attorney Docket Number	001340.P077

U.S. PATENT DOCUMENTS

Examiner Initials*	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate
my	6,195,594	Shah et al.	February 27, 2001	June 30, 1999
my	5,880,959	Shah et al.	March 9, 1999	November 25, 1997
my	6,230,062	Shah	May 8, 2001	June 30, 1999

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Examiner Initials*	Foreign Patent Document	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation? Yes/No
	Office or Country Number Date			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

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	LENNART LJUNG, IEEE Transactions on Automatic Control, Vol. AC-23, No. 5, October 1978, "Convergence Analysis of Parametric Identification Methods", pp 770-783.	No
	SERGIO VERDU, Cambridge University Press, "Multiuser Detection", 1998, pp 1-26, 56-66, 154-175, 384-387.	No
	GUANGHAN XU et al., IEEE Transactions on Signal Processing, Vol. 43, No. 12, December 1995, "A Least Squares Approach to Blind Channel Identification", pp 2982-2993.	No
	ALEXANDRA DUEL-HALLEN et al., IEEE Transactions on Communications, Vol. 37, No. 5, May 1989, "Delayed Decision-Feedback Sequence Estimation", pp 428-436.	No

Examiner	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	Filing Date November 10, 2000	
	First Named Inventor Cecilia Gabriela Galarza et al	
	Group Art Unit 2631	
	Examiner Name Unassigned	
Sheet 2 of 9	Attorney Docket Number 001340.P077	

U.S. PATENT DOCUMENTS

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	K. GIRIDHAR et al., IEEE Transactions on Communications, Vol. 45, No. 4, April 1997, "Nonlinear Techniques for the Joint Estimation of Cochannel Signals", pp 473-484.	No
	LANG TONG et al., IEEE Transactions on Signal Processing, Vol. 47, No. 9, September 1999, "Joint Order Detection and Blind Channel Estimation by Least Squares Smoothing", pp 2345-2355	No
	ERIC MOULINES et al., IEEE Transactions on Signal Processing, Vol. 43, No. 2, February 1995, "Subspace Methods for the Blind Identification of Multichannel FIR Filters", pp 516-525.	No
	ALEXANDRA DUEL-HALLEN et al., IEEE Personal Communications, April 1995, "Multiuser Detection for CDMA Systems", pp 46-58.	No

Examiner _____ Date Considered _____

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Substitute For Form 1449A/PTO (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application No.	09/710,718
		Filing Date	November 10, 2000
		First Named Inventor	Cecilia Gabriela Galarza et al.
		Group Art Unit	2631
		Examiner Name	Unassigned
Sheet 3 of 9	Attorney Docket Number	001340.P077	

U.S. PATENT DOCUMENTS

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	UPAMANYU MADHOW et al., IEEE Transactions on Communications, Vol. 42, No. 12, December 1994, "MMSE Interference Suppression for Direct-Sequence Spread-Spectrum CDMA" pp 3178-3188	No
	C. RICHARD JOHNSON, JR. et al., Proceedings of the IEEE, Vol. 86, No. 10, October 1998, "Blind Equalization Using the Constant Modulus Criterion: A Review", pp 1927-1950	No
	P. CIBLAT et al., "Asymptotic Analysis of Blind Cyclic Correlation Based Symbol Rate Estimation", September 2000	No
	DR. DENNIS J. RAUSCHMAYER, Macmillan Technology Series, "ADSL/VDSL Principles", 1999, pp 131-155.	No

Examiner Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute For Form 1449A/PTO (Modified 5-19-2000) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application No. 09/710,718	
	Filing Date November 10, 2000	
	First Named Inventor Cecilia Gabriela Galarza et al.	
	Group Art Unit 2631	
	Examiner Name Unassigned	
Sheet 4 of 9	Attorney Docket Number 001340.P077	

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	LENNART LJUNG, Prentice-Hall Information and System Sciences Series, "System Identification, Theory for the User", 1987, pp 141-163, 239-263.	No
	YAAKOV BAR-SHALOM et al., Artech House, Inc., "Estimation and Tracking: Principles, Techniques, and Software", 1993, pp 450-465.	No
	International Telecommunication Union, ITU-T Telecommunication Standardization Sector of ITU, G.840, "Definitions and Terminology for Synchronization Networks", August 1996, pp 1-20	No
	ADSL Forum Technical Report TR-024 for Network Management Working Group, "DMT Line Code Specific MIB", June 1999, pp 1-7	No

Examiner _____ Date Considered _____

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Substitute For Form 1449A/PTO (Modified 5-19-2000)		Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application No.	09/710,718	
		Filing Date	November 10, 2000	
		First Named Inventor	Cecilia Gabriela Galarza et al.	
		Group Art Unit	2631	
		Examiner Name	Unassigned	
Sheet 5 of 9		Attorney Docket Number	001340.P077	

U.S. PATENT DOCUMENTS				
Examiner Initials*	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate

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	J. CIOFFI, EEE379A, "Digital Communication: Signal Processing Class notes, Stanford University, pp 167-174, 194-197.	No
	ARTHUR GELB et al., The Analytic Sciences Corporation, "Applied Optimal Estimation", 1974, pp 156-179.	No
	SIMON HAYKIN, Prentice Hall Information and System Sciences Series, "Adaptive Filter Theory", Third Edition, 1996, pp 772-815.	No
	IAN R. PETERSEN et al., Control Engineering, "Robust Kalman Filtering for Signal and Systems with Large Uncertainties", 1999, pp 35-55.	No
Examiner		Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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PTO/SB/08A (10-96)

Approved for through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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		Filing Date	November 10, 2000
		First Named Inventor	Cecilia Gabriela Galarza et al.
		Group Art Unit	2631
Examiner Name		Unassigned	
Attorney Docket Number		001340.P077	
Sheet 6 of 9			

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	STEPHEN BOYD et al., "Convex Optimization", Course Reader for EE364: Introduction to Convex Optimization with Engineering Applications, Stanford University, Winter Quarter 1996-1997, pp 1-146.	No
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Examiner	Date Considered
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Examiner Signature	Date
<i>Min. Juy</i>	6/24/04

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Substitute For Form 1449A/PTO (Modified 5-19-2000)		Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application No	09/710,718	
		Filing Date	November 10, 2000	
		First Named Inventor	Cecilia Gabriela Galarza et al.	
		Group Art Unit	2631	
		Examiner Name	Unassigned	
Sheet 7 of 9	Attorney Docket Number	001340.P077		

U.S. PATENT DOCUMENTS				
Examiner Initials*	U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication Cited Document MM-DD-YYYY	Filing date if Appropriate

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation? Yes/No
	Office or Country	Number	Date			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), publisher, city and/or country where published (if title of the item known): (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s).	Translation? Yes/No
	D. GODARD, IEEE Transaction Communications, Vol. COM-28, No. 11, November 1980, "Self-Recovering Equalization and Carrier Tracking in Two-Dimensional Data Communication Systems, pp 1867-1875.	No
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Substitute For Form 1449A/PTO (Modified 5-19-2000)		Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application No.	09/710,610	
		Filing Date	November 10, 2000	
		First Named Inventor	Tom Pare et al.	
		Group Art Unit	2121	
		Examiner Name	Unassigned	
Sheet 8 of 9	Attorney Docket Number	001340.P078		

U.S. PATENT DOCUMENTS				
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	CRAIG MICHAEL TEUSCHER, Dissertation submitted as requirement for the degree of Dr. of Philosophy in Engineering-Electrical Engineering and Computer Sciences, "Low Power Receiver Design for Portable RF Applications: Design and Implementation of an Adaptive Multiuser Detector for an Indoor, Wideband CDMA Application, Fall 1998, pp 37, 43-52	No
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Substitute For Form 1449A/PTO
(Modified 5-19-2000)INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application No

09/710,718

Filing Date

November 10, 2000

First Named Inventor

Cecilia Gabriela Galarza et al.

Group Art Unit

2631

Examiner Name

Unassigned

Attorney Docket Number

001340.P077

Sheet 9 of 9

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	K. SAM SHANMUGAN et al., John Wiley & Sons, "Random Signals, Detection, Estimation and Data Analysis", 1988, pp 341-377.	No
	HARRY L. VAN TREES, Massachusetts Institute of Technology, "Detection, Estimation, and Modulation Theory", 1968, pp 19-163, 239-418.	

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